Gatekeeper Table

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Gatekeeper

A SMALL TABLE WITH A FOLDING LEAF THAT'S THE PERFECT PLACE TO TOSS YOUR CAR KEYS OR THE DAY'S MAIL.

by THOMAS KLENCK
photograph by CHRIS ECKERT

Finding just a bit more table space in a hallway or living room, only when you need it, isn't easy. A classic solution is the drop-leaf table, a 16th-century design still useful today because it's so efficient. Lift the leaf when you want more surface area. Drop it when you want a slimmer, neater look. There are several variations on these tables—and we chose the simplest one, with a single leaf and a fifth leg that swings out to support it. It's perfect for a foyer and can be built with basic tools and a small table saw in a home workshop.

Probably the trickiest step is cutting the leg tapers. We made it easier by designing a sled that carries the leg safely past a table saw blade at any angle. Additionally, the legs and aprons of the base go together with simple dowel joints and the top attaches easily, with screw-on fasteners. The result is a sophisticated design that you don't need sophisticated skills to carry out.

GATEFOLD PULLOUT

BONUS STEP-BY-STEP PULLOUT INSIDE

PLEASE FOLD HERE

1

3

5

7

2

4

6

8

Make the Legs and Aprons

Rip and crosscut the leg blanks and the aprons. Then cut a groove for the tabletop fasteners in each of the four leg aprons. Make the sled base, stop block and positioning strip. Lightly clamp a leg blank to the sled base, and adjust the leg so it overhangs the sled edge by ½ in. Pivot the leg so the overhang intersects the edge at 6 to 7 in. from the leg's top. Firmly clamp the leg to the sled and attach the stop and positioning strip. Stick a strip of double-sided tape to the sled base. Set the saw fence for the width of the sled, place the leg on the sled and guide it past the blade [1]. Rotate the blank clockwise and rip the adjacent side. To rip the two remaining sides, place a ¼-in.-thick spacer between the positioning strip and the blank [2]. Use a plane or sander to remove saw marks.

Join the Aprons and Legs

Use a dowel jig to bore holes in the aprons [3]. Wind a piece of masking tape around the bit to act as a depth stop. Spread some glue on the dowels and in the dowel holes, then clamp together two subassemblies—two legs and a short apron. After the glue has cured on those, join the subassemblies to the long aprons [4]. Shape the knuckle on the fixed gateleg apron, and use the dowel jig to bore the hole through the knuckle. Unless you have an unusually long bit, you'll need to use the dowel jig and bore the hole from both edges toward the center. Now cut the knuckle on the pivoting gateleg apron, test fit it to the fixed knuckle, then use the pivot hole in the fixed side to guide the drill bit through the pivoting side. Fasten the fixed apron to the table base; attach the pivoting apron with a dowel.

Make the Top

Rip and crosscut boards for the top and drop leaf. Plane the edge of each board smooth and straight; then glue and clamp two separate panels. Cut the top to finished size. Next, use a router and matched-pair router bits to cut the rule joint edge on the top and the drop-leaf panel. Position each hinge on the top, and use a knife to mark its perimeter. Cut a shallow sloping notch around the perimeter, then finish the hinge mortise by paring as shown [5]. Screw the hinges to the top and position the drop leaf adjacent to it. Mark the corresponding hinge positions and cut the hinge mortises. Join the top and drop leaf; then use a large trammel to mark the curved edge. Separate the top and the leaf and cut the curve using a jigsaw. [6] Carefully plane and sand the leaf's circumference to shape.

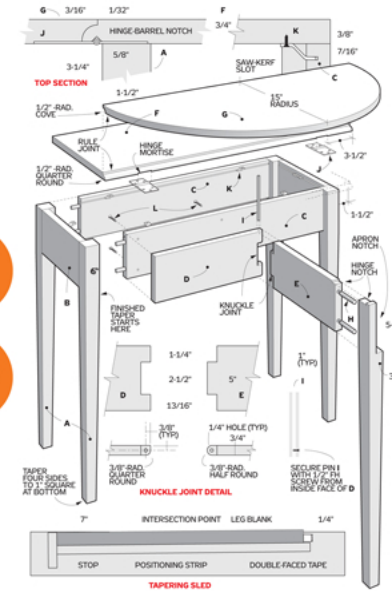
Fasten the Top

Position the base on the inverted top and mark the location of the hinge knuckle on the gateleg and pivoting apron [7]. Cut a notch in these parts so they clear the hinge knuckle when they swing shut. After the notch is cut, position the top so it overhangs the base equally. Insert the tabletop fasteners in the apron grooves, and mark the hole locations in the top [8]. Remove the base, and bore pilot holes on each mark. Finish sand the top and apply finish to both sides of the top. Finishing both sides ensures equal moisture absorption and helps the top stay flat. Apply finish to the legs and the front and back surfaces of the aprons. Place the top on a padded surface, invert the base on it, and attach the base to the top by driving screws through each tabletop fastener and into the pilot hole.

ILLUSTRATIONS AND PHOTOGRAPHS BY THOMAS KLENCK

Plans →

Materials ↓



Key	No.	Size and description (use)	Key	No.	Size and description (use)
A	5	1½" x 1½" x 28½" cherry (leg)	G	1	¾" x 15" X 30" cherry (leaf)
B	2	¾" x 5" x 9" cherry (short apron)	H	10	¼" x 2" dowel pin, Rockler No. 70367
C	2	¾" x 5" x 24" cherry (long apron)	I	1	¼" x 5" dowel pin
D	1	¾" x 5" x 12¼" cherry (fixed knuckle half)	J	1	pair drop-leaf hinges, Rockler No. 29231
E	1	¾" x 5" x 10½" cherry (pivoting knuckle half)	K	6	tabletop fastener, Rockler No. 34215
F	1	¾" x 12½" x 30" cherry (top)	L	4	1¼" No. 8 fh woodscrew

Misc: Double-sided tape (No. 25U03.11, available from Lee Valley, *www.leevalley.com*); hinges, dowel pins and tabletop fasteners available from Rockler, *www.rockler.com*.

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